

After some remarks from Mr. Stephens and Mr. Harris, as to the proceedings requisite for altering their present laws, notice was given that the motion for amending the laws of the society, respecting the election of new members, would be brought on at the next meeting.

The chairman then nominated Messrs. Crow and C. Harbert as candidates for election at the next meeting, and was therein seconded by Mr. Knight.

Upon inquiry, the average price of the best Crown Memel fir was quoted at 90s. per load, and the best 12 feet 3 inch Christians yellow deal 36s. per hundred.

The chairman proceeded to inform the meeting that the bill which was brought into Parliament last year, was entirely laid aside, and a new one is in preparation for introduction this session. He had received a letter from Lord Lincoln (who had so kindly brought their objections to the late bill under the consideration of the government), stating that the new bill was much altered in form and substance; that he would have sent a copy of it, but it was not yet out of the printer's hands. He then read the following letter:—

Whitehall Place, Dec. 25, 1843.

Sir,—The bill, which I hope to introduce very soon after the meeting of Parliament, for the regulation of building, the most important will be a good deal altered in substance, and still more in form, from that which was printed at the end of last session, after being amended in Committee."

I will send you a copy of the bill as soon as it is printed; and in the mean time, I beg leave to express my thanks to you, and the other members of the Master Carpenters' Society, for the assurance of your readiness to consider its provisions in a fair and candid spirit—a course which my past experience would lead me fully to anticipate from you.

I am, Sir, your obedient Servant,

H. Biers, Esq. (Signed) LINCOLN.

Mr. Biers, in continuation, said they had only to work with a single impulse for the benefit of the community. All the suggestions which they had made to the crown surveyors had been attended to; and the crown solicitors said that the referees should be paid out of the county rate instead of by fees. Referees will be of very great assistance, that is, if care be taken to appoint proper persons. It appeared to him (Mr. B.) probable that the referees were to be selected from architects. He would suggest the propriety of their getting the word "architect" struck out, and replaced by the words, "from competent persons." Under these circumstances he begged to leave in the hands of the meeting the appointment of a committee to watch the bill through parliament.

Mr. Knight proposed the following gentlemen as the committee:—Messrs. Biers, Lever, Sparke, C. W. Knight, Stephens, Harris, Higgin, Grissell, Pein, W. Cubitt, Bursall, sen., Allen, Lawrence, Stokes, and Lock, which was seconded by Mr. Bursall, jun., and carried unanimously.

The other business being concluded, the second meeting-day was named for two months hence.

**NEW FIELD OF COAL.**—For some time back, workmen belonging to the Duke of Hamilton have been employed boring for coal at Brighton, in the immediate vicinity of the Polmont station, on the Edinburgh and Glasgow Railway. Their labours have been rewarded by the discovery of a seam of coal of very considerable thickness, and which is undisturbed, extends to upwards of 3,000 acres. The coal has been burned in a small gas-work, and from the quality of the light it is evident it must be a first-rate household coal.—*Scotch Reformer's Gazette.*

## DR. KEENAN'S LECTURE.

THE HUMAN BODY A GALVANIC BATTERY.

GREAT excitement having been evinced in consequence of the first of a series of lectures, now delivered by Dr. Keenan at the Royal Polytechnic Institution, on the function of the lungs being considered as a galvanic battery, we cannot refrain from furnishing our scientific readers with some of the prominent ideas of the lecturer, as being new and original. That in order to prove the human body is an electro-motive machine, propelled by the lungs (like a steam-engine), it was to be remembered, 1st, That in all chemical actions electricity is evolved; 2nd, That the chemical action which takes place in the lungs by the union of the oxygen of the air with the carbon and hydrogen of the blood, is highly fitted for the extrication of electricity, which accordingly takes place in great abundance; and 3rd, That the electric fluid is an adequate cause of motion, being proved to be by the fact that the respiration is re-established in a drowned person after it has wholly ceased, whilst the limbs, and even the trunk, are by it put in motion after life is gone,—phenomena which, to the same extent, cannot be produced by any other known agent. It was to be observed that all the facts in question agree in one general principle, viz. in requiring a stream of air and a supply of food; the use of food being twofold; 1st, To sustain the formation of the body, and 2nd, To supply the blood with carbon and hydrogen for the purpose of generating, with the oxygen of the air, the morbid gas, called the lungs. To establish the foregoing several instances to prove that exhaustion from want of food arises more from the deficiency of moving power than from loss of substance, and that, consequently, food is required to supply the former rather than the latter; that the constitution of our food is of two kinds, one coming principally from the oxydizable materials, viz. carbon and hydrogen for producing with oxygen the moving power, and might hence be called the *respiratory food*, whilst the other is mainly of nitrogen and the salts, and is the *plastic material* for composing the animal body. So long as food was supposed to be for nutrition alone, it was not easy to perceive what became of it; because the body did not continue to increase although a man continued to eat. To account for this paradox, an hypothesis was adopted which has no foundation in nature, viz. that there is a constant removal of old and a constant deposition of new particles, so that the whole of the body was renewed every seven years. The reasons given to show this idea is a fallacy would take more room than can be given to this article; and we shall, therefore, content ourselves by stating the arguments of the Doctor, who remarked, that when a fat man takes a fever, and becomes emaciated, his emaciation is no proof of the real staminal parts of his body having changed; because fat is no part of the body, as such, but is merely a depository of digested food (charcoal and hydrogen) which, in the absence of eating, the constitution gives up to the air, to combine with the oxygen for the production of force to keep the blood in circulation, and to maintain other vital actions. Neither is it a true proof in the famous experiment of feeding animals on madder; for although in time the dyed textures of the animal become white, this is to be attributed to the absorption of this colouring matter as a *foreign material*, and not to the removal of the coloured textures themselves. Neither are experiments on starved animals of any value, because it is easy to show that certain changes must have then taken place, which could not have occurred if the animals had been naturally fed. To us appeared to be of great importance the remarks to the following effect:—Why man breathes so differently from a fish, and why he is not yet answered by comparative anatomy. Why does a man in the process of breathing expend so much of the force generated in breathing? Is the maximum force produced by combining the carbon and hydrogen with oxygen in a vacuum? If so, why should not the maximum of the maximum effect be realized by practical engineers, who, in producing the greatest heat from the least inflammable matter, might, in imitation of nature, effect it in a vacuum like the thoracic, and not only so, but bring the inflammable matter and

air (as in breathing) in contact through a great number of capillary tubes.

Dr. Keenan concluded his address, which lasted for an hour and a quarter, and of which this is but an abstract report, by repeated *applaudissements* from a crowded and scientific audience; and, in conclusion, we may declare we never recollect having heard a more ingenious and extraordinary lecture. The course will be continued this evening at eight o'clock, and at the same hour on the evenings of the following four Saturdays.

## MR. GODWIN'S LECTURE ON ARCHITECTURE.

On Thursday, Jan. 25, George Godwin, Esq., F.R.S. and S.A., delivered a lecture in the theatre of the Western Literary Society, on the progress of architecture, from the earliest times that present any evidence of the efforts of man having been directed to the construction of edifices for domestic or sacred purposes. The lecturer prefaced his view of the course of architecture downwards by some observations on its paramount interest as a fine art—as affording us the landmarks of history, and incontrovertible evidence of the degree of refinement and intellectual culture existing among nations that, even thousands of years ago, have not ceased to improve in those arts which the perpetually progressive change to which the surface of the globe is subject. The historian, amid the gloom and desolation of regions that have once been famous, finds nothing now there to trim his lamp by save those monuments which their inhabitants have set up to commemorate the past. In these the artist must all turn who would consider the state of the earlier races of mankind, for thus have they described themselves in imperishable characters of stone. The lecturer alluded to the primitive state of man as pastoral and dwelling in tents, and as living in caves. After sustaining the same sort of view to every art and shelter; in the barbarous state, but one remove from beasts of prey, caves and tents served as shelter from the rays of the sun and the inclemency of the weather. The latter of these habitations is that to which mankind has most tenaciously clung; since dwellers in tents have existed in all countries, and still inhabit large tracts of country, and some of the same as they were thousands of years ago. Those, on the contrary, who dwell in caves or "in the rock," aimed at something beyond the rude burrow, and attempted architectural embellishment: the banks of the Nile present examples of their efforts to this end in the excavations of the Thebes. Here were the royal habitations and the exercise of sacred mysteries; many such dwellings and temples yet remain, showing us that men inhabited the "living rock," and also found sepulture therein. Having touched upon many of the records in Scripture bearing upon his subject, Mr. Godwin spoke of the Druidical remains in Britain, and the various absurd theories adduced to account for such an assemblage of huge stones, which, it is not difficult to show, attest in themselves that their arrangement is in nowise owing to chance, since those which are placed horizontally upon others are hollowed to receive the tops of the latter in such manner as to constitute a solid human edifice. Aliars were the first, and simplest attempts at construction. They were formed of a few stones piled together; they were afterwards more elaborately constructed, and at length covered in by edifices upon which every magnificence was lavished, figuring to the eye the great temple of Solomon. Besides the obelisks, hence, remarkable Druidical remains exist, as at Urawick and other places, which are, with much probability, supposed to have been places appointed for the periodical assemblages of the people on occasions of great religious festivals. In South America relics very similar in arrangement and construction are found. It has been a matter of question as to how such immense blocks of stone could be moved into and adjusted in the positions they occupy. This is accounted for, most probably, by supposing that a mound of earth was formed, to the top of which they were gradually moved, and thence tilted over to their intended site. Of the many extraordinary edifices mentioned in sacred history, there are but few of them of which we can have any just conception. It has been remarked by more than one writer, that the shades of the living have never destroyed,